Application No.: 10/562,440

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) An alkaline battery comprising a positive electrode, a negative electrode and an alkaline electrolyte,

said positive electrode comprising a positive electrode material mixture containing nickel oxyhydroxide, electrolytic manganese dioxide and a graphite conductive material,

wherein the amount of said nickel oxyhydroxide is 30 to 60 wt%, and the amount of said electrolytic manganese dioxide is 40 to 70 wt%, relative to the total amount of said nickel oxyhydroxide and said electrolytic manganese dioxide contained in said positive electrode material mixture,

said nickel oxyhydroxide comprises a crystal having a β type structure, said crystal having manganese dissolved therein, and

the amount of said manganese contained in said nickel oxyhydroxide is 0.5 to 10 mol% relative to the total amount of nickel and said manganese contained in said nickel oxyhydroxide.

2. (Currently Amended) An alkaline battery comprising a positive electrode, a negative electrode and an alkaline electrolyte,

said positive electrode comprising a positive electrode material mixture containing nickel oxyhydroxide, electrolytic manganese dioxide and a graphite conductive material,

said nickel oxyhydroxide comprising a crystal having manganese dissolved therein and having a β type structure,

wherein, the amount of said nickel oxyhydroxide is 30 to 60 wt%, and the amount of said electrolytic manganese dioxide is 40 to 70 wt%, relative to the total amount of said nickel oxyhydroxide and said electrolytic manganese dioxide contained in said positive electrode material mixture,

said nickel oxyhydroxide comprises a crystal having manganese dissolved therein and having a β type structure,

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when a molded article comprising a mixture of said nickel oxyhydroxide and said graphite conductive material is immersed in an aqueous solution containing 40 wt% KOH and a constant current per gram of said nickel oxyhydroxide of 5 mA is applied to said molded article, the potential of said molded article has a first plateau region ranging from +500 to +100 mV relative to an Hg/HgO electrode and a second plateau region ranging from +100 to -400 mV relative to said Hg/HgO electrode,

the discharge capacity per gram of said nickel oxyhydroxide in said first plateau region is 220 to 250 mAh, and

the discharge capacity per gram of said nickel oxyhydroxide in said second plateau region is 10 to 25 mAh.

- 3. (Canceled)
- 4. (Canceled)
- 5. (Original) The alkaline battery in accordance with claim 1,

wherein the amount of said graphite conductive material is 3 to 10 wt% relative to the total amount of said nickel oxyhydroxide, said electrolytic manganese dioxide and said graphite conductive material contained in said positive electrode material mixture.

6. (Original) The alkaline battery in accordance with claim 2,

wherein the amount of said graphite conductive material is 3 to 10 wt% relative to the total amount of said nickel oxyhydroxide, said electrolytic manganese dioxide and said graphite conductive material contained in said positive electrode material mixture.

7. (Original) The alkaline battery in accordance with claim 1,

wherein said positive electrode material mixture further contains at least one rare earth metal oxide selected from the group consisting of Y₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃ and Lu₂O₃, and the amount of said rare earth metal oxide is 0.1 to 2 wt% relative to the total amount of said nickel oxyhydroxide, said electrolytic manganese dioxide, said graphite conductive material and said rare earth metal oxide.

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8. (Currently Amended) The alkaline battery in accordance with claim 2,

wherein said positive electrode material mixture further contains at least one rare earth metal oxide selected from the group consisting of Y₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃ and Lu₂O₃, and the amount of said rare earth metal oxide is 0.1 to 2 wt% relative to the total amount of said nickel oxyhydroxide, said electrolytic manganese dioxide, said graphite conductive material and said rare earth metal oxide.

9. (New) The alkaline battery in accordance with claim 1,

wherein said positive electrode material mixture further contains at least one rare earth metal oxide selected from the group consisting of Er₂O₃, Tm₂O₃, Yb₂O₃ and Lu₂O₃, and the amount of said rare earth metal oxide is 0.1 to 2 wt% relative to the total amount of said nickel oxyhydroxide, said electrolytic manganese dioxide, said graphite conductive material and said rare earth metal oxide.

10. (New) The alkaline battery in accordance with claim 2,

wherein said positive electrode material mixture further contains at least one rare earth metal oxide selected from the group consisting of Er₂O₃, Tm₂O₃ and Lu₂O₃, and the amount of said rare earth metal oxide is 0.1 to 2 wt% relative to the total amount of said nickel oxyhydroxide, said electrolytic manganese dioxide, said graphite conductive material and said rare earth metal oxide.